4.2 LAND USE

This section identifies potential impacts on existing land uses within Ames Research Center and its surrounding area from each of the five alternatives.

A. Standards of Significance

An alternative for the NASA Ames Development Plan (NADP)would have a significant impact with regard to land use if it would:

- Introduce new land uses incompatible with established uses at or surrounding Ames Research Center.
- Create uses that would be incompatible with land uses planned under the General Plans of Santa Clara County or the Cities of Mountain View and Sunnyvale.
- Conflict with existing use of Moffett Airfield.

B. Impact Discussion

This section discusses potential conflicts with existing and planned land uses for Ames Research Center and the area surrounding it for each of the five proposed alternatives. The land use analysis calls out two different kinds of impacts. The first involves direct conflicts between the land uses included in the alternatives and the existing and planned land uses at Ames Research Center and the surrounding area. Direct conflicts could arise if new uses generated substantial amounts of noise, pollution, or types of traffic that significantly impacted surrounding areas. These direct conflicts between new and existing land uses are treated in depth in this section, and mitigation measures for them are proposed.

The second type of impact discussed involves potential impacts on existing and planned land uses from the secondary effects of the new development proposed in the alternatives. Here impacts would arise not from direct conflicts between land uses, but from potential secondary impacts generated by the new land uses,

such as increases in traffic congestion. These secondary impacts are discussed briefly in the Land Use section, but detailed analysis and mitigation measures are located in the relevant sections, such as Section 4.3: Traffic and Circulation and Section 4.4: Air Quality.

1. Existing Land Uses

As described in Section 3.2 of this EIS, the primary existing land uses at Ames Research Center are office, research and development, maintenance, storage, retail, and open space. Uses in surrounding areas include office, research and development, light industrial, residential, commercial and open space.

The land uses introduced under each of the five alternatives would relate to existing land uses within Ames Research Center and its surrounding areas in the following ways:

- Under Alternative 1, no new development beyond the approved baseline would occur at Ames Research Center. The impacts of this development were previously described in the 1994 Comprehensive Use Plan (CUP) and California Air National Guard (CANG) EAs, which both resulted in Findings of No Significant Impact (FONSIs). No additional uses with noise, air quality, or heavy truck traffic impacts would be introduced, so there would be no conflicts with established uses at the Center or in the areas of Mountain View and Sunnyvale surrounding it.
- Under Alternatives 2 through 4, new land uses within Ames Research Center would include office, education, research and development, university, museum, light industrial, conference center, a disaster training center, housing, and retail uses, as described in Chapter 2 of this EIS. Under Alternative 5, new land uses would be the same as in Alternatives 2 through 4, except that no disaster training center would be constructed.

  The new uses included in Alternatives 2 through 5 would be compatible with existing uses at Ames Research Center and its immediate surroundings because no new uses with direct noise, air quality, or heavy truck traffic impacts would be introduced. The exception to this would be impacts from construction during the years when development proposed under the

NADP is being constructed. These impacts are addressed in Section 4.4: Air Quality and Section 4.10: Noise.

There would also be indirect land use impacts through increases in demand for basic infrastructure and services. New traffic generated would have impacts on local roadways and air quality. The increase in the daily human population at Ames Research Center could also adversely affect the burrowing owl population. These impacts are addressed in the individual topical sections in this chapter of the EIS.

With the exception of construction traffic, there would be no direct conflicts between the land uses proposed in the five alternatives and existing land uses at Ames Research Center or in the surrounding areas of Mountain View or Sunnyvale. Potential indirect impacts indicated above are analyzed in Section 4.3: Traffic and Circulation, Section 4.4: Air Quality, Section 4.5: Infrastructure and Drainage, Section 4.6: Services, Section 4.9: Biological Resources, Section 4.10: Noise, and Section 4.14: Socio-Economics.

2. Cumulative Planned Uses

As described in Section 3.2 of this EIS above, planned cumulative land uses in the areas of Mountain View and Sunnyvale surrounding Ames Research Center include office, research and development, industrial, and recreational open space. The land uses introduced under each of the five alternatives would relate to planned land uses within the areas surrounding Ames Research Center in the following ways:

- Under Alternative 1, no new land uses would be created at Ames Research Center, so there would be no incompatibilities with land uses planned under the General Plans of the Cities of Mountain View and Sunnyvale.
- Under Alternatives 2 through 5, the new office, research and development, educational, retail, visitor attraction, housing, and open space land uses created would have no direct conflicts with planned land uses through the generation of noise or air quality impacts.

None of the land uses proposed under any of the five alternatives for the NADP would have significant impacts on any of the land uses planned for adjacent areas of Mountain View and Sunnyvale.

3. Airfield Operations

The major land use considerations for the areas surrounding Moffett Federal Airfield are to ensure that any new land uses do not interfere with safety clearances established by federal regulations and will not be adversely affected by the noise generated by airfield operations.

The NADP does not propose any changes to the operations of Moffett Federal Airfield. The only functional change to the airfield would be the relocation of the air traffic control tower to the Eastside/Airfield area, in a location to be determined by specific studies. This relocation would be subject to separate review by the FAA.

Ames Research Center has applied Federal Aviation Administration (FAA) civilian standards to determine adjacent land uses and airport operating clearances for Moffett Field. The controlling documentation regarding such clearances and design criteria are based on FAA Regulations Part 77, and a review of these requirements was completed in parallel with NADP planning efforts.

None of the construction proposed under the NADP would violate or affect the navigable airspace of the airfield. No proposed development would penetrate the Transitional Surface described in Section 3.2, nor would any structures be built within the Building Restriction Line. New construction along Cody Road would not intrude into the runway clearances, taxiway clearances, or proposed apron clearances.

As stated in Section 3.2, Hangars 1, 2 and 3 are considered to be in violation of federal airspace regulations because they exceed the Transitional Surface slope, but because they predate existing federal regulations, and because they are part of the Shenandoah Plaza Historic District, there are no plans to alter the

structure of the hangars. The NADP proposes to change the use of Hangar 1 from a dirigible hangar to an educational facility. Any alterations to the structure would comply with all historic preservation requirements outlined in the HRPP. Although the change in use would involve no changes to the exterior character of the hangar, preliminary alteration plans would also be submitted to the FAA as a "notice of construction."

Because the NADP does not propose any changes to airfield operations, no changes to the existing noise levels would occur. As demonstrated in Figure 3.10-7, existing noise levels in the Eastside/Airfield area do not exceed 65 dB outside the area immediately surrounding the runways. Housing proposed in the NRP and Bay View areas would be in areas where noise exposure due to airfield operations is less than 60 dB CNEL, based on current airfield operations. Therefore, there would be no noise impacts to adjacent land uses under the proposed NADP.

Overall, no impacts to or from airfield operations would occur.

C. Impacts and Mitigation Measures

As explained above, there would be no significant conflicts with existing or planned land uses under any of the five alternatives, and thus no mitigation measures would be necessary.

It is possible that proposed changes in land use within Ames Research Center could have indirect impacts on traffic, noise, air quality, infrastructure, services, and biological resources. These impacts are in the relevant sections of this chapter.